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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,825	09/03/2003	Soon Wei Wong	015113-0064 - B76132	4132
33649	7590	05/17/2007		
Mr. Christopher John Rourk Jackson Walker LLP 901 Main Street, Suite 6000 DALLAS, TX 75202			EXAMINER CHAWAN, SHEELA C	
			ART UNIT	PAPER NUMBER
			2624	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/653,825	Applicant(s) WONG ET AL.	
	Examiner Sheela C. Chawan	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 5- 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 5-23 is/are rejected.
- 7) ☒ Claim(s) 21-23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on Feb 28, 2007 has been entered and made of record.

Claims 2-4 are canceled.

Claims 21-23 are added new claims.

Claims 1, 5-23 are pending in the application.

Response to Argument

2. Applicant's arguments see page of the remarks, filed Feb 28, 2007 with respect to claims 1-20 have been fully considered and are persuasive. The rejection of has been withdrawn.

Applicant's arguments see page of the remarks, filed Feb 28, 2007, with respect to claims 1-20 under 102(b) rejection have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Stone (US.4,593,406).

Claim Objections

3. Claim 21-23 are objected to because of the following informalities:

Claim 21-23 invoke 112 6th paragraph having means plus function while

Independent claim 1 does not invoke 112 6th paragraph.

Please make appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5 - 22, are rejected under 35 U.S.C. 102(b) as being anticipated by Stone (US.4,593,406).

As to claim 1, Stone discloses an inspection system comprising: a rotating prism (fig 2, 84, prism image rotator) having a first end and a second end (fig 2), where the first end receives a first image area and rotates about a center point so as to cover a field of view area that is larger than the first image area, and the second end remains centered on the center point and provides the first image to a view area that has constant dimensions (fig 2, column 6, lines 13- 30, column 8, lines 49- 64, column 9, 32- 40); and

an image data system disposed at the second end of the rotating prism, the image data system generating image data as the prism rotates so as to generate two or more sets (column 10, lines 25- 64) of image data (fig 2) from the field of view area (column 8, lines 49- 64).

As to claim 5, Stone discloses the system of claim 1 further comprising a quadrant inspection system coupled to the image data system, the quadrant inspection system receiving image data from one of four quadrants of the field of view area (fig 2, column 10, lines 25- 68, column 11, lines 8- 68, column 12, lines 1- 6).

As to claim 6, Stone discloses the system of claim 1 further comprising a prism rotation controller coupled to the rotating prism, the prism rotation controller setting the rotation speed of the prism (column 8, lines 49- 64).

As to claim 7, Stone discloses the system of claim 1 further comprising an image data acquisition control coupled to the image data system, the image data acquisition control setting an image capture rate (fig 1,).

As to claim 8, Stone discloses the system of claim 1 further comprising a quadrant data analysis system receiving the image data and generating die quadrant image data (fig 1, 24, column 6, lines 48- 62).

As to claim 9, Stone discloses an identification system receiving the image data and generating die image data (column 9, lines 6- 23).

As to claim 10, Stone discloses the system of claim 1 further comprising a component identification (note, component corresponds to dumbbell) system receiving the image data and generating component image data (fig 2, column 10, lines 25- 68, column 11, lines 1-7).

As to claim 11, Stone discloses the system of claim 1 further comprising a component inspection system receiving the image data and generating component pass/fail data (column 11, lines 43- 68, column 12, lines 1- 6).

As to claim 12, see the rejection of claim 1 above.

As to claim 13, see the rejection of claim 1 above.

As to claim 14, Stone discloses the method of claim 13 wherein the item is a semiconductor die (column 9, lines 14- 23).

As to claim 15, Stone discloses the method of claim 13 wherein the first area image data corresponds to a first quadrant of a semiconductor die (fig 1, element 14 corresponds to first quadrant, column 8, lines 49- 64, column 6, lines 11- 32,) the second area image data corresponds to a second quadrant of the semiconductor die (fig 1, element 16 corresponds to second quadrant, column 6, lines 11- 32), the third area image data corresponds to a third quadrant of the semiconductor die (fig 1, element 18 corresponds to third quadrant, column 6, lines 11- 32), and a fourth area image data corresponds to a fourth quadrant of the semiconductor die (fig 1, element 20 corresponds to fourth quadrant, column 6, lines 11- 32, column 7, lines 2- 26, column 10, lines 25- 68, column 11, lines 8- 53).

As to claim 16, see the rejection of claim 1 and 15 above.

As to claim 17, see the rejection of claim 1 and 15 above.

As to claim 18, Stone discloses the method of claim 16 further comprising rotating the second area image data to align with the first area image data (column 5, lines 19- 59, column 9, lines 41-68, column 10, lines 1- 68, column 11, lines 8- 53).

As to claim 19, Stone discloses the method of claim 18 further comprising eliminating overlapping sections of the image data (column 5, lines 19- 59, column 6, lines 11- 32, column 7, lines 2- 26, column 10, lines 25- 68, column 11, lines 8- 53).

As to claim 20, Stone discloses the method of claim 16 further comprising analyzing the second area image database on a predetermined angular relationship to the first area image data (column 6, lines 11- 32, column 7, lines 2- 26, column 10, lines 25- 68, column 11, lines 8- 53).

Other prior art cited

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Raney et al., (US.5,212,647) discloses die stamping press having CCD camera system for automatic 3-axis die registration.

DeAngelis et al., (US. 5,430,666) discloses automated method and apparatus for calibration of laser scanning in a selective laser sintering apparatus.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela C Chawan whose telephone number is. 571-272-7446. The examiner can normally be reached on Monday - Thursday 7.30 - 6.00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sheela Chawan
Patent Examiner
Group Art Unit 2624
May 10, 2007

Sheela Chawan
SHEELA CHAWAN
PRIMARY EXAMINER